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| 10/743,694 | 12/22/2003 | James P. Kleckner | P01091US2A | 7802 |
| <div>7590 02/21/2007 Michael R. Huber Bridgestone Americas Holding, Inc. 1200 Firestone Parkway Akron, OH 44317</div> | | | <div>EXAMINER MAKI, STEVEN D</div> | |
| | | | <div>ART UNIT 1733</div> | <div>PAPER NUMBER</div> |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/743,694

Applicant(s)

KLECKNER, JAMES P.

Examiner

Steven D. Maki

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9, 12-16, 19-26 and 30-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9, 12-16, 19-26, 30-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1733

- 1) The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 2) Claims 30-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 30, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is "no portion of the sidewall overhanging the tag disposed in the cavity". There is no explicit support for this language in the original disclosure. Moreover, the original disclosure fails to reasonably convey the subject matter of "no portion of the sidewall overhanging the tag disposed in the cavity" because this subject matter is inconsistent with figure 4A. In figure 4A, a portion of the sidewall is radially above the tag and thereby "overhangs" the tag.

- 3) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1733

4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Japan 325

5) **Claims 9, 12-13, 15-16, 19-22, 24-25, 30-32 and 34-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 325 (JP 2001-63325).**

Japan 325 discloses a tire having a tread 1, belt 2, carcass 4, bead wires 5, bead part 8, side tread 3, recess 8a and transponder 7 having receiver and transmitter functions wherein transponder ("tag") is disposed in the recess 8a ("cavity"). See translation and figure 1. The distance A between the center of the transponder 7 and the rim flange is up to 100 mm (3.93 inches). See page 9 of translation and figure 6. As can be seen from figure 1, recess 8a is shown as having "an opening at the outer surface of the sidewall". It is noted that Japan 325 describes holding the transponder "by the side tread rubber [sidewall rubber]". See page 8 of translation. The claimed tire is anticipated by Japan 325's tire. The claimed cavity reads on the recess 8a. The claimed tag reads on the transponder. The claimed bead portion reads on the portion including bead wire 5. The description of "at the outer surface of the sidewall" fails to require a location different from that disclosed by Japan 325. It is emphasized that the center of Japan 325's transponder may be 100 mm (3.9 inches) above the rim flange.

With respect to "the encapsulation material adhering to the sidewall to secure the tag to the sidewall" (claim 9) and "the encapsulation material having been applied to the

Art Unit: 1733

sidewall after the sidewall was previously cured" (claim 9), the epoxy material disclosed by Japan 325 inherently adheres to the rubber after the rubber of the sidewall is vulcanized. In other words, curing of the sidewall rubber adjacent to the encapsulated tag inherently results in adherence between the sidewall rubber and the encapsulation material of the tag.

As to claims 12-13, Japan 325 teaches coating the transponder with epoxy resin. See for example page 13 of translation. The claimed encapsulation material reads on the epoxy resin.

As to claims 15-16, see location of transponder / recess shown in figure 6 and described on page 9 of the translation.

As to claims 19-22 and 24-25, note above comments on claims 9, 12-13 and 15-16.

Claims 30-32 and 34-35 correspond to claims 21-22 and 24-25. Claims 30-32 and 34-35 are included in this rejection since (1) both Japan 325 and the original disclosure show *a portion of the sidewall being radially above the tag* and (2) "no portion of the sidewall overhanging the tag disposed in the cavity" is not supported by the original disclosure as noted in the 112 first paragraph rejection. Claim 30 fails to require the tag to not be trapped by the sidewall.

Japan 325 with Adamson et al (filed 6-11-02, available under 102(e))

6) **Claims 9, 12-16, 19-26 and 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 325 in view of Adamson et al (WO 03/105509, filed 6-11-02).**

Japan 325 is considered to anticipate claim 9. In any event: It would have been obvious to one of ordinary skill in the art to encapsulate Japan 325's tag for a tire with encapsulation material as claimed such that the encapsulation material adheres to the sidewall to secure the tag to the sidewall in view of Adamson et al's suggestion to surround a "tag" for a tire comprising an antenna 20 and a radio device 11 with an insulation coating 22, which has good adherence with the rubber material of the tire. Adamson et al teaches that the insulation coating 22 allows for very high frequency or higher radio transmission from the antenna to thereby improve the read range of the "tag". Hence, Japan 325 and Adamson et al teach encapsulating a tag for a tire with encapsulation material and Adamson et al recommends using encapsulation material having good adherence with rubber of the tire.

In claim 9, "the encapsulation material adhering to the sidewall to secure the tag to the sidewall" and "the encapsulation material having been applied to the sidewall after the sidewall was previously cured" fail to require adherence different from that suggested by Japan 325 and Adamson et al. In particular, the product by process language of "the encapsulation material having been applied to the sidewall after the sidewall was previously cured" fails to require a materially different product than that suggested by the applied prior art to Japan 325 and Adamson et al. See MPEP 2113.

As to claims 12-14 and 21-23 (claimed specific encapsulation material), see page 6 of Adamson et al.

As to claim 19, Japan 325 and Adamson et al suggest entirely surrounding the tag with encapsulation material.

As to claims 15-16, 20 and 24-25 (claimed tag location), see figures 1 and 6 of Japan 325.

As to claim 26, Adamson et al suggest a "tag" comprising a central body with wires extending from both sides of the central body. See figure 1.

Claims 30-35 correspond to claims 21-25. Claims 30-35 are included in this rejection since (1) both Japan 325 and the original disclosure show a portion of the sidewall being radially above the tag and (2) "no portion of the sidewall overhanging the tag disposed in the cavity" is not supported by the original disclosure as noted in the 112 first paragraph rejection. Claim 30 fails to require the tag to not be trapped by the sidewall.

Remarks

7) Applicant's arguments filed 11-13-06 have been fully considered but they are not persuasive.

The rejection of Japan 325 in view of at least one US 5731754, EP 694861 and EP 1049196 has been withdrawn because (1) Adamson et al, but not US 5731754, EP 694861 and EP 1049196, teaches using the *same* insulating material to encapsulate the "tag" (antenna 20 and radio device 11) and adhere the "tag" (antenna 20 and radio device 11) to rubber of the tire and (2) Adamson et al remains available as prior art under 102(e). With respect to 102(e), applicant states: "Adamson [h]as been cited as prior art under 102(e) and the Applicant reserves his ability to investigate whether this reference can be removed as prior art based on the date of invention". It is emphasized that no timely 131 declaration for antedating Adamson et al has been received.

Applicant argues that independent claims 9, 19 and 30 require the adhesion force to be created by the application of [the step of applying] the encapsulation material to the sidewall of the tire. In response, examiner comments that product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. See MPEP 2113. Claims 9, 19 and 30 fail to require "adherence" different from that obtained by vulcanizing rubber adjacent cured encapsulation material as suggested by the applied prior art. With respect to Japan 325, curing of the sidewall rubber adjacent to the encapsulated tag inherently results in adherence between the sidewall rubber and the encapsulation material of the tag. Furthermore, Adamson et al motivates one of ordinary skill in the art to select the encapsulating material such that it encapsulates the device and adheres to the rubber of the tire. No unexpected results (e.g. improved adherence) over the applied prior art has been shown.

Applicant argues that Japan 325's encapsulated transponder is trapped within the sidewall with an interference fit. This argument is not commensurate in scope with the claims and is therefore not persuasive since the claims read on and fail to exclude the tag being trapped within the sidewall. The present claims fail to require cavity structure different from that disclosed by Japan 325.

Applicant argues that the encapsulation material of Japan 325 does not adhere the tag to the sidewall of the tire as recited in claims 9 and 19 because it is already cured before ever contacting the material of the sidewall. This argument is not persuasive since (1) Japan 325's rubber sidewall is uncured before ever contacting the

encapsulation material of the tag and (2) curing of the sidewall rubber inherently adheres the sidewall rubber to the encapsulation material of the tag.

Applicant argues that Japan 325 teaches a process that is essentially opposite of the claimed invention. This argument is not persuasive since the present claims are directed to a tire instead of a process.

Applicant argues that Japan 325's tire is essentially the opposite of the claimed invention. Examiner disagrees since Japan 325's tire, like the claimed tire, comprises a tag disposed in a cavity at the outer surface. With respect to "adherence", Japan 325's curing of the sidewall rubber inherently adheres the sidewall rubber to the encapsulation material of the tag and Adamson et al suggests forming a tag using encapsulation material having good adherence with rubber.

Applicant comments that Japan 325's transponder is fully exposed to the heat of the tire vulcanization process. Claims 9, 19 and 30 fail to exclude exposing the claimed tag to heat equivalent to the heat of the tire vulcanization process. Furthermore, no unexpected results over Japan 325 have been shown.

With respect to Adamson et al, applicant argues that the cured encapsulation material of this reference does not adhere the tag to the sidewall as recited in the claims. This argument is not persuasive. Adamson et al teaches selecting coating material (encapsulating material) such as "butadiene rubber" and "epoxy" such that good adherence with the rubber of the tire is obtained. See first full paragraph on page 6 of Adamson et al. The adherence obtained by curing an assembly of *uncured material - cured material* (uncured sidewall - cured encapsulating material) is not seen

as being different from curing an assembly of *cured material - uncured material* (cured sidewall - uncured encapsulating material). This is especially true when rubber is used for the encapsulating material and the sidewall - "butadiene rubber" being one of the coating materials (encapsulating materials) disclosed by Adamson et al.

Applicant comments: "The claimed invention uses the encapsulation material to adhere the tag to the sidewall after the sidewall has been formed and cured" (emphasis added). Examiner comments that it is undisputed that Adamson et al teaches using encapsulation material to obtain good adherence between the tag and tire rubber.

With respect to applicant's arguments regarding "overhanging" in new claim 30, note the 112 first paragraph rejection. Claim 30 fails to require the tag to not be trapped by the sidewall.

8) No claim is allowed.

9) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1733


the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven D. Maki
February 19, 2007


STEVEN D. MAKI 2-20-07
PRIMARY EXAMINER